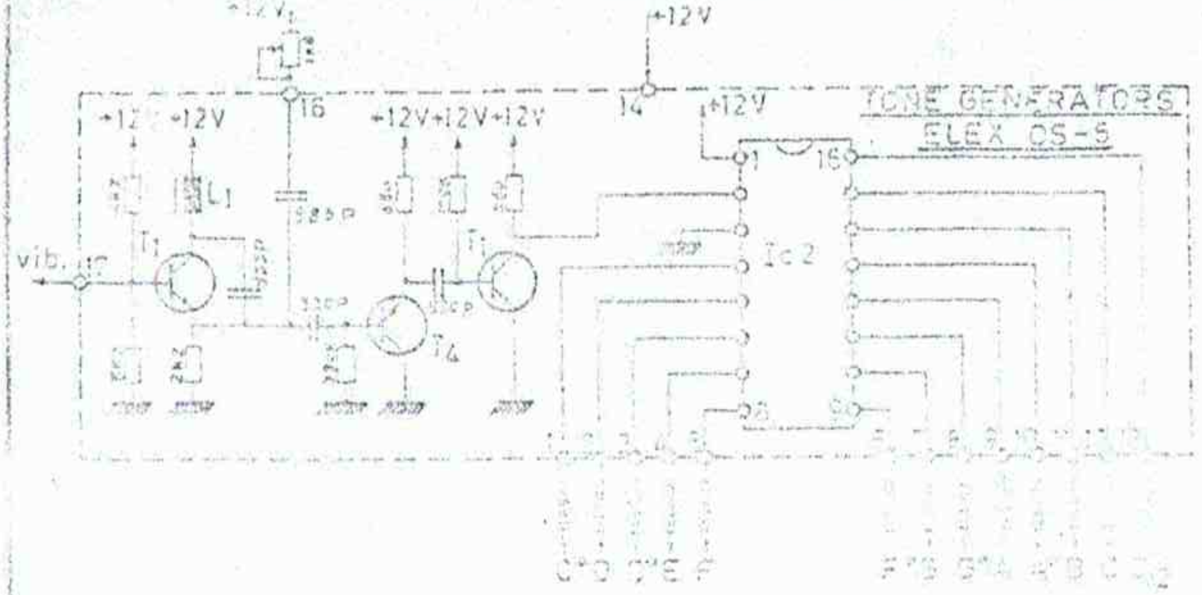
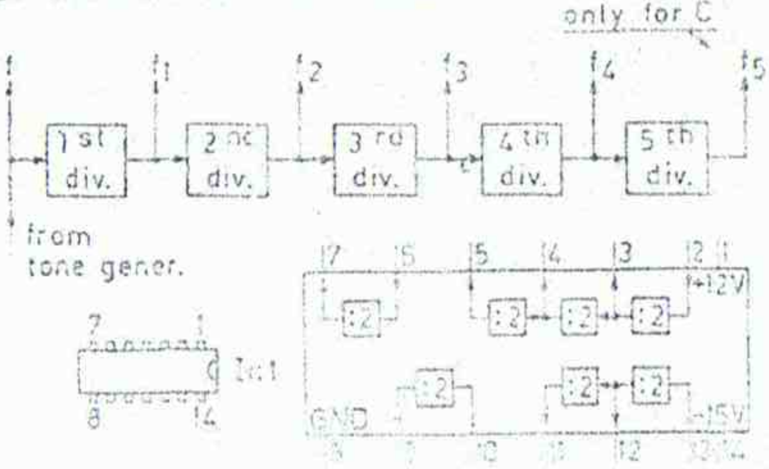
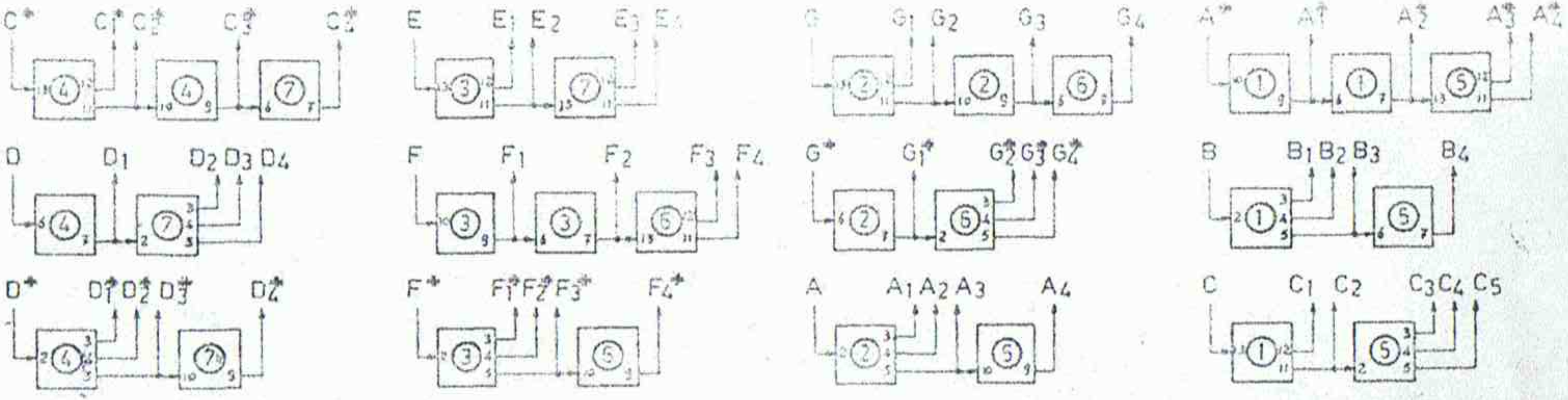
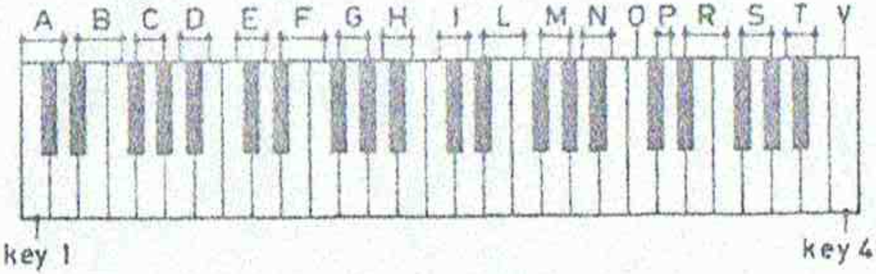
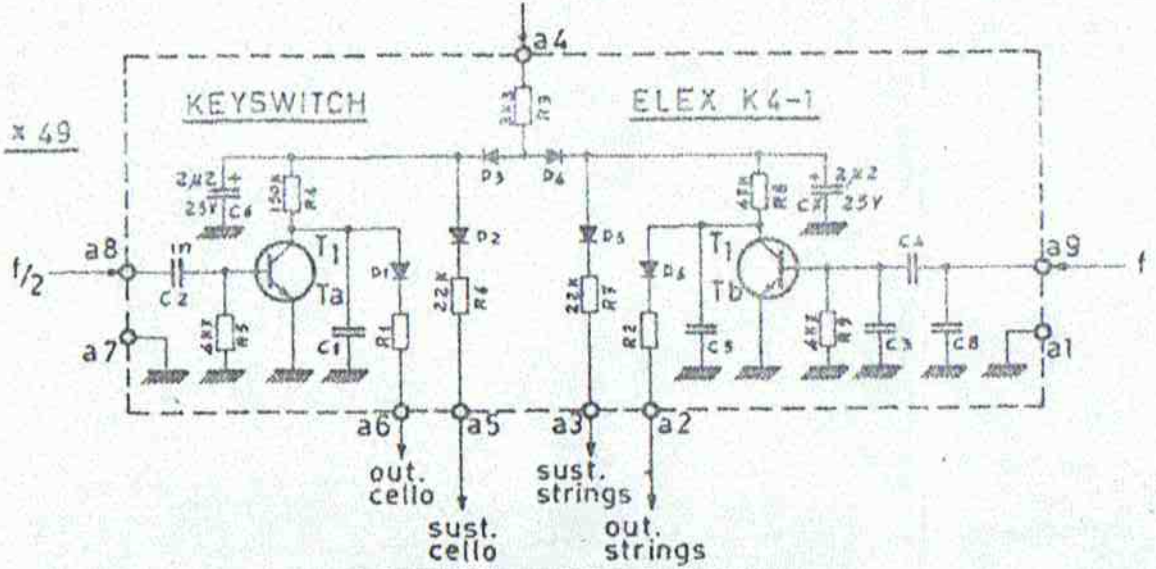


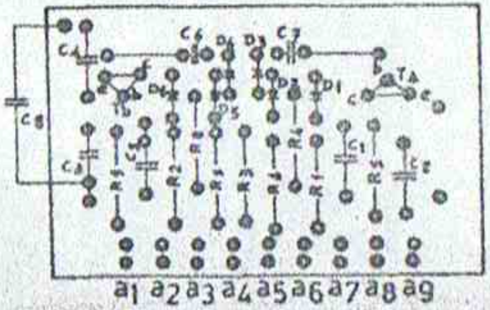




mod. K4	project:	checked
ELEX	dis.	pag. 3

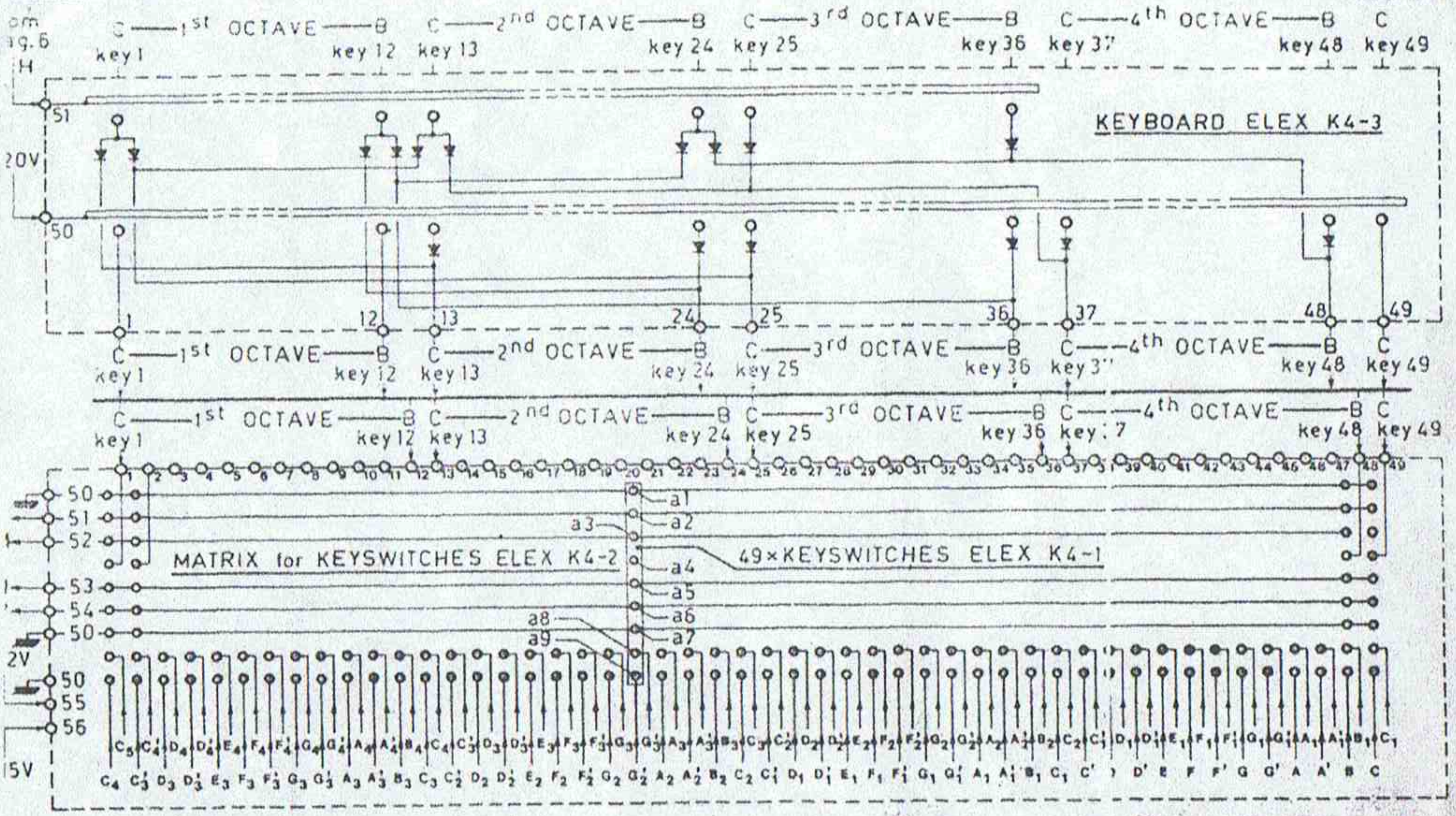






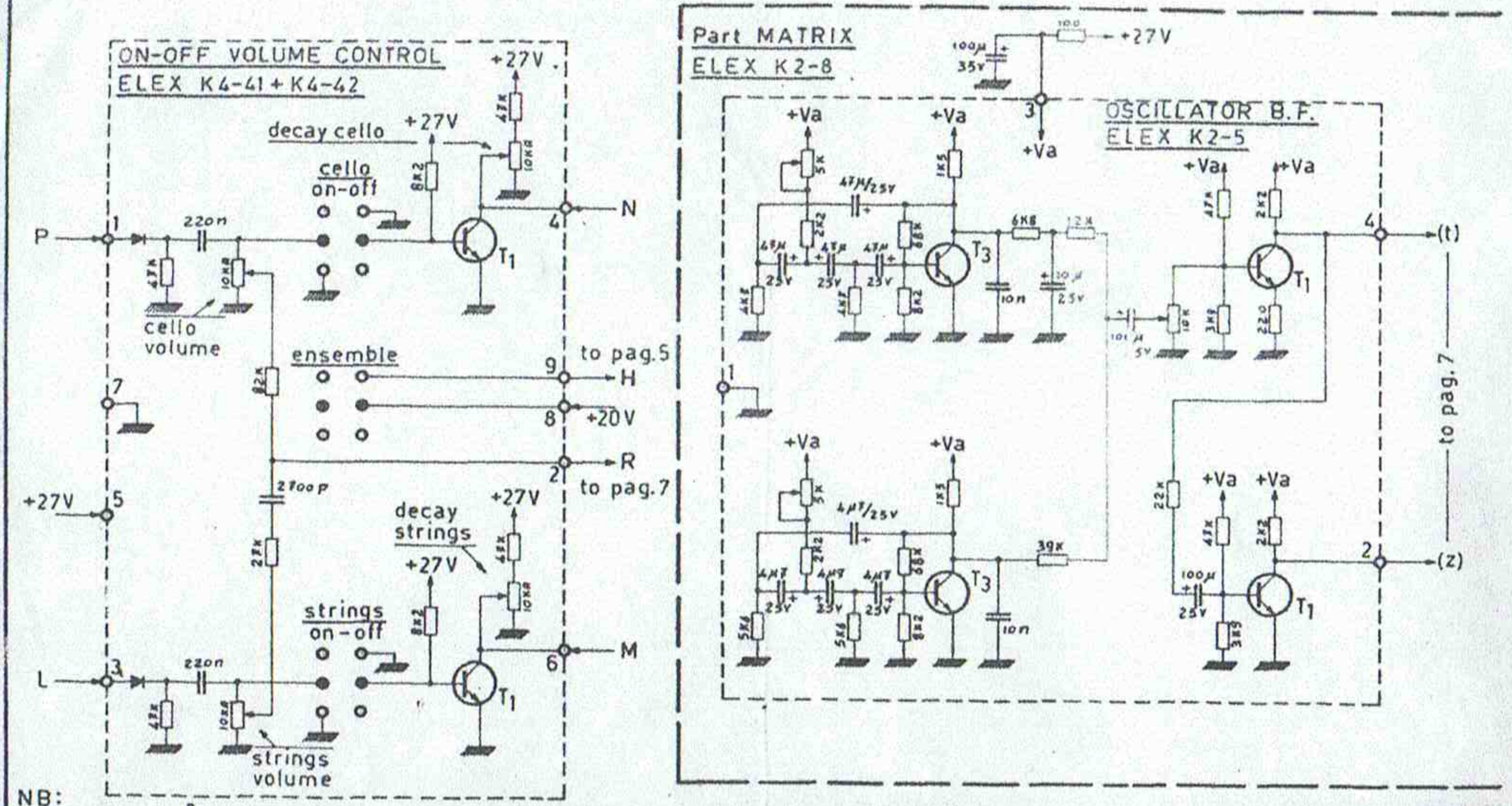
for key type	nF					KΩ	
	C	C3	C4	C5	C8	R1	R2
A	39	—	4,7	5,6	—	560	560
B	33	—	4,7	4,7	—	560	560
C	27	—	4,7	3,9	—	560	560
D	22	—	4,7	3,3	—	560	560
E	18	—	4,7	2,7	—	560	560
F	15	—	4,7	2,2	—	560	560
G	12	—	4,7	1,8	—	560	560
H	10	—	4,7	1,2	—	560	560
I	8,2	—	4,7	0,82	—	470	470
L	6,8	—	4,7	0,47	—	470	390
M	5,6	—	6,8	0,25	—	390	330
N	4,7	—	6,8	0,12	—	390	270
O	3,9	6,8	8,2	—	8,2	330	390
P	3,9	—	1	1	22	330	330
R	3,3	—	1	1	22	330	330
S	2,7	—	1	1	22	270	330
T	2,2	—	1	1	22	270	220
V	1,8	—	1	1	22	220	330

mod. K 4	project;	checked:
ELEX	dis.	pag. 4

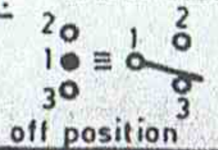

om
ig.6
H
C —— 1st OCTAVE —— B
C —— 2nd OCTAVE —— B
C —— 3rd OCTAVE —— B
C —— 4th OCTAVE —— B
C
key 1
key 12
key 13
key 24
key 25
key 36
key 37
key 48
key 49
51
50
20V
KEYBOARD ELEX K4-3
1
12
13
24
25
36
37
48
49
MATRIX for KEYSWITCHES ELEX K4-2
49×KEYSWITCHES ELEX K4-1
a1
a2
a3
a4
a5
a6
a7
a8
a9
50
51
52
53
54
50
2V
50
55
56
15V
C5 C4' D4 D4' E4 F4 F4' G4 G4' A4 A4' B4 C4 C3' D3 D3' E3 F3 F3' G3 G3' A3 A3' B3 C3 C2' D2 D2' E2 F2 F2' G2 G2' A2 A2' B2 C2 C1' D1 D1' E1 F1 F1' G1 G1' A1 A1' B1 C1
C4 C3' D3 D3' E3 F3 F3' G3 G3' A3 A3' B3 C3 C2' D2 D2' E2 F2 F2' G2 G2' A2 A2' B2 C2 C1' D1 D1' E1 F1 F1' G1 G1' A1 A1' B1 C1 C' D D' E F F' G G' A A' B C

L-M-N-P → to pag.6

mod. K4	project:	checked:
ELEX	des.	pag. 5



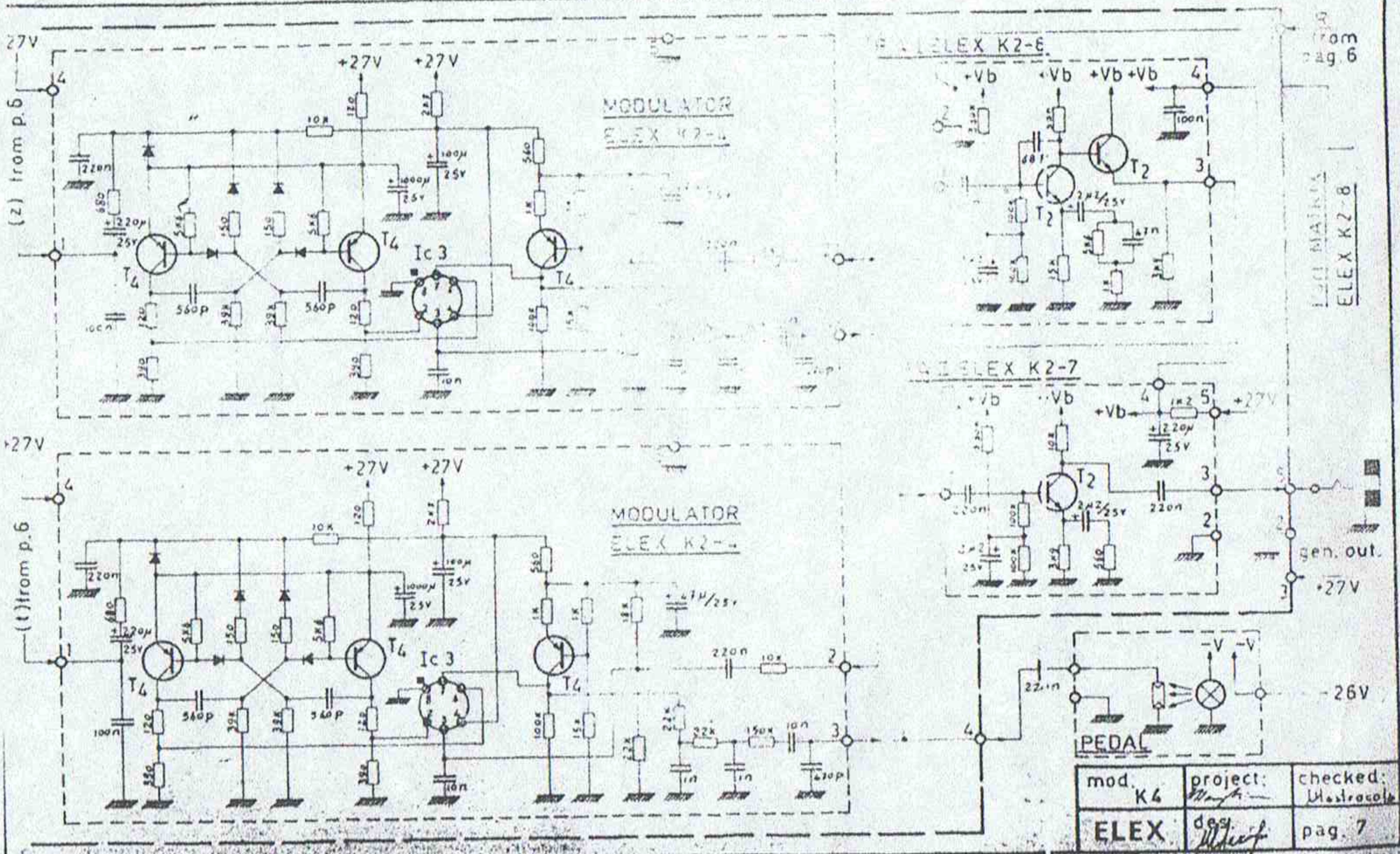
NB:



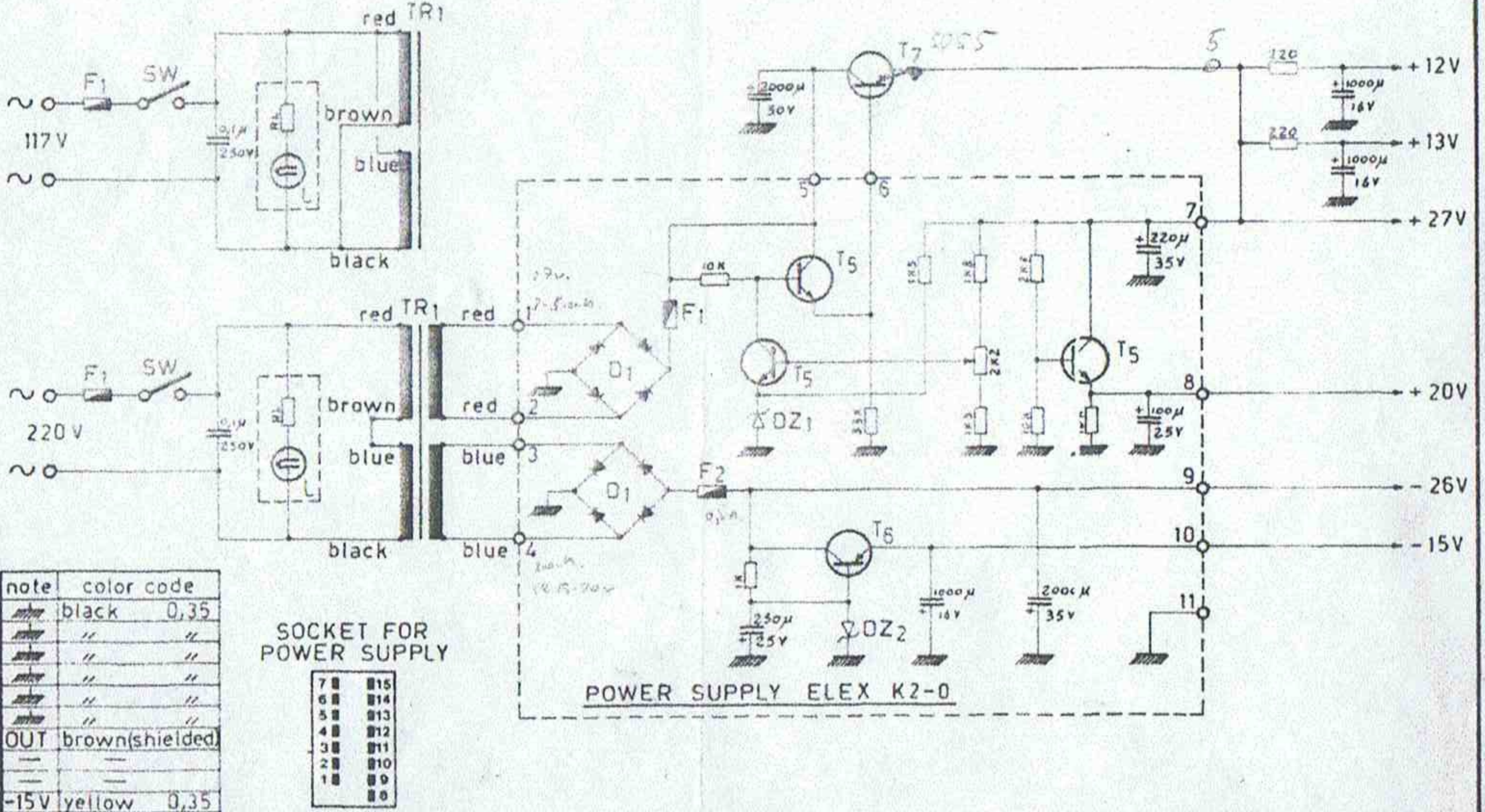
off position

L-M-N-P → from pag. 5

mod. K 4	project:	checked:
ELEX	des.	pag. 6



mod. K4	project:	checked:
ELEX	des.	pag. 7



PIN	note	color code	
1	⏚	black	0,35
2	⏚	"	"
3	⏚	"	"
4	⏚	"	"
5	⏚	"	"
6	⏚	"	"
7	OUT	brown(shielded)	
8	—	—	
9	—	—	
10	-15V	yellow	0,35
11	+12 V	red	"
12	+20V	blue	"
13	+27V	orange	"
14	pedal	red (shielded)	
15	⏚		

mod. K4	project:	checked:
ELEX	des	pag. 8

TMS 3848 = SAJ 180 = E 5002

PARTS LIST

Ic_1 = Integrated circuit – AY-1-5050 G.E. – SAJ 180 Mistral
Ic_2 = 〃 〃 – MK-50240 N MOSTEK
Ic_3 = 〃 〃 – TCA 350 ITT

L_1 = Induttance 160 μH

T_1 = Transistor NPN — BC 170b - BC 183a - BC 208b - BC 239b
T_2 = 〃 NPN — BC 330 - T 413c
T_3 = 〃 NPN — BC 208c
T_4 = 〃 PNP — BC 251b
T_5 = 〃 NPN — BC 286b
T_6 = 〃 PNP — BC 160b
T_7 = 〃 NPN — 2N 3055

DZ_1 = Zener 11 V 400 mW
DZ_2 = 〃 15 V 400 mW

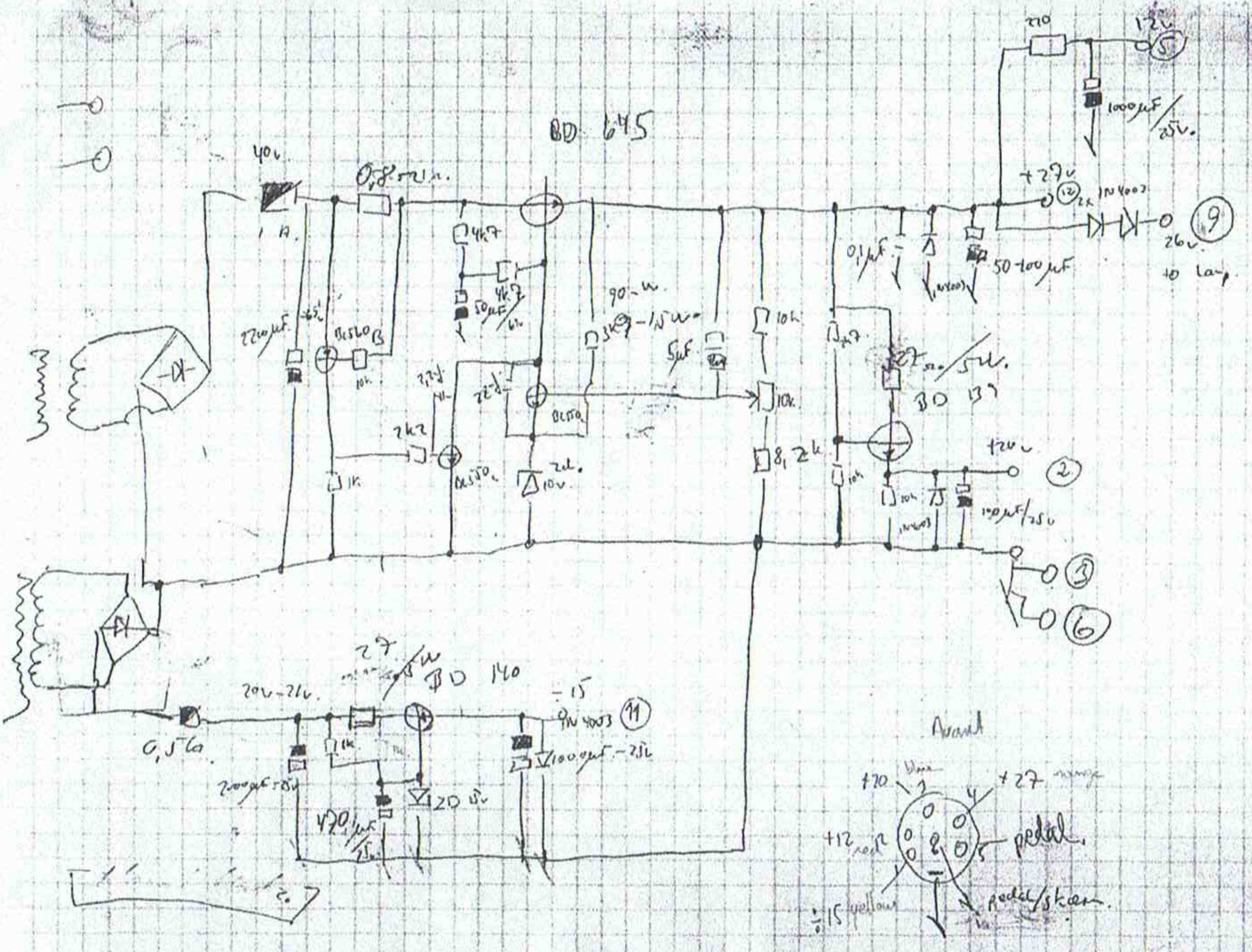
D_1 = Diodes 1N 4002 - F 12 (100 V - 1A)
All other diodes are D 542 (Texas) or BA 130

F_1 = Fuse 1A – 225 V
F_2 = 〃 0,5A – 225 V

TR_1 = Transformer ELEX EE 13
SW = Switch 15A – 125 V
L = Lamp Neon 220 V

All resistors ½ W unless otherwise indicated
All tabswitches shown in off position
All keyswitches shown in off position

ELEX reserves the right
of changing features at
any time, without notice
whatsoever.


BD 645
40v
1 A.
0,8 - 2W.
4k7
4k7
50µF/6v
2200µF - 65v
BC560 B
10k
2,2µF
2k2
1k
BC550
22µF
BC550
2x 10v.
90 - W.
3k9 - 1,5W
5µF
10k
10k
8,2k
4k7
27Ω/5W.
BD 139
10k
10k
1N4003
100µF/25v
+20v
2
3
6
+27v
12
2x 1N4003
26v
to lamp
9
0,1µF
1N4003
50-100µF
220
12v
5
1000µF/25v.
0,5A
20v - 26v
27
5W
BD 140
-15
1N4003
11
100µF - 25v
2000µF - 25v
1k
1k
470µF/25v
ZD 15v
Avant
+20 blue 1
+27 orange 4
+12 red 2
pedal. 5
-15 yellow
8
pedal/stem.